

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (original) An inhibitor of c-Jun phosphorylation caused by c-Jun N-terminal kinase 3, having at least one function selected from the group consisting of the following functions:

- i) inhibiting the binding of p21-activated kinase 4 (PAK4) to MAP kinase kinase 7 (MKK7);
- ii) inhibiting the phosphorylation of MKK7 caused by PAK4;
- iii) inhibiting the binding of JNK/SAPK-inhibitory kinase (JIK) to MAP kinase kinase 7 (MKK7); and
- iv) inhibiting the phosphorylation of MKK7 caused by JIK.

2. (original) A method for inhibiting c-Jun phosphorylation caused by c-Jun N-terminal kinase 3, comprising at least one step selected from the group consisting of the following steps:

- i) inhibiting the binding of p21-activated kinase 4 (PAK4) to MAP kinase kinase 7 (MKK7);
- ii) inhibiting the phosphorylation of MKK7 caused by PAK4;
- iii) inhibiting the binding of JNK/SAPK-inhibitory kinase (JIK) to MAP kinase kinase 7 (MKK7); and
- iv) inhibiting the phosphorylation of MKK7 caused by JIK.

3. (original) An agent for preventing and/or treating a disorder attributable to c-Jun

phosphorylation caused by c-Jun N-terminal kinase 3, having at least one function selected from the group consisting of the following functions

- i) inhibiting the binding of p21-activated kinase 4 (PAK4) to MAP kinase kinase 7 (MKK7);
- ii) inhibiting the phosphorylation of MKK7 caused by PAK4;
- iii) inhibiting the binding of JNK/SAPK-inhibitory kinase (JIK) to MAP kinase kinase 7 (MKK7); and
- iv) inhibiting the phosphorylation of MKK7 caused by JIK.

4. (currently amended) ~~An~~ The agent for preventing and/or treating a disorder according to claim 3, wherein the agent prevents and/or treats a neurodegenerative disorder, having at least one function selected from the group consisting of the following functions:

- ~~i) inhibiting the binding of p21-activated kinase 4 (PAK4) to MAP kinase kinase 7 (MKK7);~~
- ~~ii) inhibiting the phosphorylation of MKK7 caused by PAK4;~~
- ~~iii) inhibiting the binding of JNK/SAPK-inhibitory kinase (JIK) to MAP kinase kinase 7 (MKK7); and~~
- ~~iv) inhibiting the phosphorylation of MKK7 caused by JIK.~~

5. (original) A method for preventing and/or treating a disorder attributable to c-Jun phosphorylation caused by c-Jun N-terminal kinase 3, comprising at least one step selected from the group consisting of the following steps:

- i) inhibiting the binding of p21-activated kinase 4 (PAK4) to MAP kinase kinase 7 (MKK7);

- ii) inhibiting the phosphorylation of MKK7 caused by PAK4;
- iii) inhibiting the binding of JNK/SAPK-inhibitory kinase (JIK) to MAP kinase kinase 7 (MKK7); and
- iv) inhibiting the phosphorylation of MKK7 caused by JIK.

6. (currently amended) A method for preventing and/or treating a disorder according to claim 5, wherein the method prevents and/or treats a neurodegenerative disorder, comprising at least one step selected from the group consisting of the following steps:

- ~~i) inhibiting the binding of p21-activated kinase 4 (PAK4) to MAP kinase kinase 7 (MKK7);~~
- ~~ii) inhibiting the phosphorylation of MKK7 caused by PAK4;~~
- ~~iii) inhibiting the binding of JNK/SAPK-inhibitory kinase (JIK) to MAP kinase kinase 7 (MKK7); and~~
- ~~iv) inhibiting the phosphorylation of MKK7 caused by JIK.~~

7. (original) A method for identifying a compound that inhibits the binding of p21-activated kinase 4 (PAK4) to MAP kinase kinase 7 (MKK7), comprising contacting PAK4 and/or MKK7 with a test compound under conditions that allow the binding of PAK4 to MKK7; and determining whether the test compound inhibits the binding of PAK4 to MKK7, by detecting the presence, absence or change of a signal generated by the binding of PAK4 to MKK7.

8. (original) A method for identifying a compound that inhibits the binding of JNK/SAPK-inhibitory kinase (JIK) to MAP kinase kinase 7 (MKK7), comprising contacting JIK and/or MKK7 with a test compound under conditions that allow the binding of JIK to MKK7; and

determining whether the test compound inhibits the binding of JIK to MKK7, by detecting the presence, absence or change of a signal generated by the binding of JIK to MKK7.

9. (original) A method for identifying a compound that inhibits the phosphorylation of MAP kinase kinase 7 (MKK7) caused by p21-activated kinase 4 (PAK4), comprising contacting PAK4 and/or MKK7 with a test compound; and determining whether the test compound inhibits the phosphorylation of MKK7 caused by PAK4, by introducing a system using a signal and/or a marker capable of detecting the phosphorylation of MKK7 and detecting the presence, absence or change of the signal and/or the marker.

10. (original) A method for identifying a compound that inhibits the phosphorylation of MAP kinase kinase 7 (MKK7) caused by JNK/SAPK-inhibitory kinase (JIK), comprising contacting JIK and/or MKK7 with a test compound; and determining whether the test compound inhibits the phosphorylation of MKK7 caused by JIK, by introducing a system using a signal and/or a marker capable of detecting the phosphorylation of MKK7 and detecting the presence, absence or change of the signal and/or the marker.

11-19. (canceled)

20. (currently amended) A pharmaceutical composition containing an effective amount of at least one member selected from the group consisting of the following compounds and the inhibitors:

i) a compound that inhibits the binding of p21-activated kinase 4 (PAK4) to MAP

kinase kinase 7 (MKK7),

ii) a compound that inhibits the binding of JNK/SAPK-inhibitory kinase (JIK) to MKK7,

iii) a compound that inhibits the phosphorylation of MKK7 caused by PAK4,

iv) a compound that inhibits the phosphorylation of MKK7 caused by JIK,

v) an inhibitor of the binding of PAK4 to MKK7,

vi) an inhibitor of the binding of JIK to MKK7,

vii) an inhibitor of the phosphorylation of MKK7 caused by PAK4; and

viii) an inhibitor of the phosphorylation of MKK7 caused by JIK ~~of the compounds according to claims 11 to 15 and the inhibitors according to claims 16 to 19.~~

21. (currently amended) ~~An~~ The agent for preventing and/or treating a disorder attributable to ~~e-Jun phosphorylation caused by e-Jun N-terminal kinase 3, containing an effective amount of at least one member selected from the group consisting of the compounds according to claims 11 to 15 and the inhibitors according to claims 16 to 19~~ according to claim 3, wherein the agent contains an effective amount of at least one member selected from the group consisting of the following compounds and the inhibitors:

i) a compound that inhibits the binding of p21-activated kinase 4 (PAK4) to MAP kinase kinase 7 (MKK7),

ii) a compound that inhibits the binding of JNK/SAPK-inhibitory kinase (JIK) to MKK7,

iii) a compound that inhibits the phosphorylation of MKK7 caused by PAK4,

iv) a compound that inhibits the phosphorylation of MKK7 caused by JIK,

- v) an inhibitor of the binding of PAK4 to MKK7,
- vi) an inhibitor of the binding of JIK to MKK7,
- vii) an inhibitor of the phosphorylation of MKK7 caused by PAK4; and
- viii) an inhibitor of the phosphorylation of MKK7 caused by JIK.

22. (currently amended) ~~An~~ The agent for preventing and/or treating a disorder according to claim 21, wherein the agent prevents and/or treats a neurodegenerative disorder, containing an effective amount of at least one member selected from the group consisting of the compounds according to claims 11 to 15 and the inhibitors according to claims 16 to 19.

23. (currently amended) The agent for preventing and/or treating a disorder according to claim 22, wherein the agent prevents and/or treats a neurodegenerative disorder according to claim 5 or 22, wherein the neurodegenerative disorder is polyglutamine disease, Huntington's disease, spino-cerebellar ataxia, bulbo-spinal muscular atrophy, dentaterubral-pallidoluysian atrophy, Alzheimer's disease, Down syndrome, Parkinson's disease, dementia with Lewy bodies, multisystem atrophy, familial amyotrophic lateral sclerosis, progressive supranuclear palsy, corticobasal degeneration, Pick's disease, familial British dementia, Creutzfeldt-Jakob disease, Gerstmann-Stranssler syndrome, mad cow disease (bovine spongiform encephalopathy) (BSE), or familial dementia associated with neuroserpin inclusion bodies.

24. (currently amended) ~~A~~ The method for preventing and/or treating a disorder according to claim 5, comprising using at least one member selected from the group consisting of the following compounds and the inhibitors:

i) a compound that inhibits the binding of p21-activated kinase 4 (PAK4) to MAP kinase kinase 7 (MKK7),

ii) a compound that inhibits the binding of JNK/SAPK-inhibitory kinase (JIK) to MKK7,

iii) a compound that inhibits the phosphorylation of MKK7 caused by PAK4,

iv) a compound that inhibits the phosphorylation of MKK7 caused by JIK,

v) an inhibitor of the binding of PAK4 to MKK7,

vi) an inhibitor of the binding of JIK to MKK7,

vii) an inhibitor of the phosphorylation of MKK7 caused by PAK4; and

viii) an inhibitor of the phosphorylation of MKK7 caused by JIK~~attributable to c-Jun phosphorylation caused by c-Jun N-terminal kinase 3, comprising using at least one member selected from the group consisting of the compound according to claims 11 to 15 and the inhibitor according to claims 16 to 19.~~

25. (currently amended)-A The method for preventing and/or treating a disorder according to claim 24, wherein the method prevents and/or treats a neurodegenerative disorder,~~comprising using at least one member selected from the group consisting of the compound according to claims 11 to 15 and the inhibitor according to claims 16 to 19.~~

26. (currently amended) The method for preventing and/or treating a disorder according to claim 25, wherein the method prevents and/or treats a neurodegenerative disorder~~according to claim 6 or 25, wherein the neurodegenerative disorder is polyglutamine disease, Huntington's disease, spino-cerebellar ataxia, bulbo-spinal muscular atrophy, dentaterubral-pallidoluyian~~

atrophy, Alzheimer's disease, Down syndrome, Parkinson's disease, dementia with Lewy bodies, multisystem atrophy, familial amyotrophic lateral sclerosis, progressive supranuclear palsy, corticobasal degeneration, Pick's disease, familial British dementia, Creutzfeldt-Jakob disease, Gerstmann-Strassler syndrome, mad cow disease (bovine spongiform encephalopathy) (BSE), or familial dementia associated with neuroserpin inclusion bodies

27. (original) A reagent kit containing at least one member selected from the group consisting of p21-activated kinase 4 (PAK4), JNK/SAPK-inhibitory kinase (JIK), a polynucleotide encoding PAK4, a polynucleotide encoding JIK, a vector containing a polynucleotide encoding PAK4 and a vector containing a polynucleotide encoding JIK; and at least one member selected from the group consisting of MAP kinase kinase 7 (MKK7), a polynucleotide encoding MKK7 and a vector containing a polynucleotide encoding MKK7.

28. (currently amended)-~~A~~ The reagent kit according to claim 27, wherein the reagent kit that is used in the identification method according to any one of claims 7 to 10, ~~containing at least one member selected from the group consisting of p21-activated kinase 4 (PAK4), JNK/SAPK-inhibitory kinase (JIK), a polynucleotide encoding PAK4, a polynucleotide encoding JIK, a vector containing a polynucleotide encoding PAK4 and a vector containing a polynucleotide encoding JIK; and at least one member selected from the group consisting of MAP kinase kinase 7 (MKK7), a polynucleotide encoding MKK7 and a vector containing a polynucleotide encoding MKK7.~~